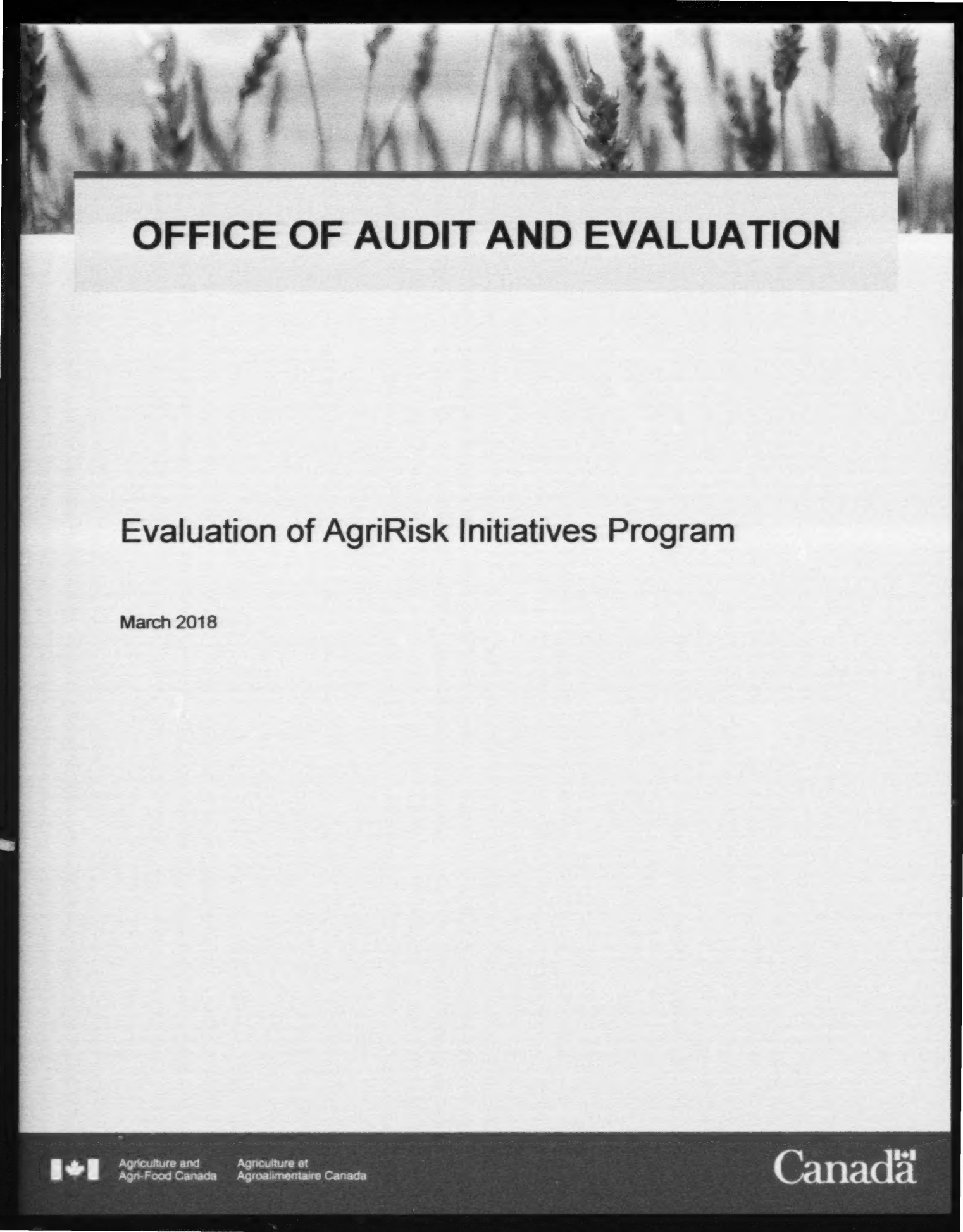




OFFICE OF AUDIT AND EVALUATION

Evaluation of AgriRisk Initiatives Program

March 2018



Agriculture and
Agri-Food Canada

Agriculture et
Agroalimentaire Canada

Canada

The Deputy Minister approved this evaluation report on *March 21, 2018*.

Evaluation of AgriRisk Initiatives Program

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Abbreviations

AAFC	Agriculture and Agri-Food Canada
BRM	Business Risk Management
FPT	Federal-Provincial-Territorial
FY	Fiscal Year
GF2	Growing Forward 2
PDQ	Price and Data Quotes
R&D	Research and Development

EXECUTIVE SUMMARY

Purpose

The evaluation of AgriRisk Initiatives Program was undertaken by Agriculture and Agri-Food Canada's (AAFC) Office of Audit and Evaluation (OAE) as part of the 2016-17 to 2020-21 Departmental Evaluation Plan. The results of this evaluation are intended to inform future program and policy decisions.

Methodology and Scope

The evaluation specifically assessed program activities and results achieved by the Program from 2013-14 to 2017-18. To assess the Program's relevance and performance, the evaluation collected and analysed program documents, performance and financial data, relevant literature, interviews with internal and external key informants, a survey of program recipients, and case studies on specific projects.

Background

AgriRisk is a new program offered under Growing Forward 2 (GF2), the five-year (2013-14 to 2017-18) federal-provincial-territorial Multilateral Framework Agreement for Canada's agricultural and agri-food sector. As part of changes to Business Risk Management (BRM) coverage, AgriRisk was designed to facilitate the development and adoption of new private sector or producer-funded agricultural risk management products, tools and services, outside of those available under BRM programs. AgriRisk encourages partnerships among governments and the private sector to develop and deliver new risk management tools and services addressing agricultural business risks. To achieve this, AgriRisk delivers support through two streams:

- *Research and Development (R&D) stream:* up to \$500,000 per year in grants and contributions assistance for research and development of potential new private sector and industry-led risk management tools, including insurance products.
- *Administrative Capacity Building stream:* up to \$5-million per year in grants and contributions assistance and up to \$750,000 for one-time seed funding for cost-shared federal-provincial-territorial initiatives to implement and administer new private risk management tools.

The total budget allocated for AgriRisk was \$57,288,486 from 2013-14 to 2017-18. The R&D stream is federally funded with industry matching contributions, while the Administrative Capacity Building stream is generally cost-shared 60:40 with provincial and territorial governments.

Findings

- Given the barriers for new business risk products and the impact unaddressed risks have on producer livelihoods, AgriRisk is relevant by supporting the development and implementation of new agricultural risk management tools that

address emerging and diverse risks faced by the Canadian agricultural sector.

- AgriRisk's mandate and programming aligns with federal priorities, roles and responsibilities such as innovation, climate change, and underrepresented groups in farming. It aligns with needs and priorities of the Canadian agricultural sector by addressing risks that most concern producers.
- AgriRisk is progressing towards achieving program outcome targeted at increasing industry awareness of new agricultural risk management tools through industry participation and outreach activities in projects. The Program is progressing towards increasing industry's access to new or expanded risk management tools.
- The Program made progress towards increasing industry adoption of new or expanded business risk management tools. Due to the early stage of most projects in the development process and the limited number of Administrative Capacity Building projects, it is too early for the evaluation to measure the full extent to which the Program has increased adoption in this evaluation.
- The low number of projects in the Administrative Capacity Building stream and its importance for program outcomes indicate the Administrative Capacity Building requirements may require reconsideration to increase uptake of applications.
- The low number of projects in the Administrative Capacity Building stream may require further collaboration from relevant industry expertise and stakeholders to ensure projects are attractive to potential implementers and users.
- AgriRisk maintains low operational costs and offers useful non-financial support to project recipients. Program delivery can be improved to reduce inefficiencies in processes that delay approvals and reimbursements.

Recommendations

Recommendation 1: The Assistant Deputy Minister, Programs Branch, should expand AgriRisk's promotional efforts to increase awareness of the Program.

Recommendation 2: The Assistant Deputy Minister, Programs Branch, should review the requirements of the Administrative Capacity Building stream to increase the access of projects.

Recommendation 3: The Assistant Deputy Minister, Programs Branch, should incorporate fora that use industry expertise, networks and experience, such as external program advisory councils or involving external expertise in the program for further industry coordination and engagement.

Recommendation 4: The Assistant Deputy Minister, Programs Branch, should clarify, streamline, and communicate program procedures, guidelines and processes, to reduce the time to approve applications and reimburse claims.

1.0 INTRODUCTION

The evaluation of AgriRisk Initiatives Program was undertaken by AAFC's Office of Audit and Evaluation (OAE) as part of the 2016-17 to 2020-21 Departmental Evaluation Plan. This evaluation fulfills a requirement of the *Financial Administration Act* and Treasury Board *Policy on Results*. AgriRisk was established to assist the industry in the research, development, and implementation of new risk management products and strategies to help producers respond to various agricultural risks affecting their business and livelihoods. At AAFC, AgriRisk is managed within the Programs Branch, Business Risk Management Programs Directorate. The results of this evaluation are intended to inform future program and policy decisions.

2.0 METHODOLOGY AND SCOPE

The evaluation was conducted in accordance with the Treasury Board *Policy on Results* and *Directive on Results*. It assessed the relevance and performance of AgriRisk, specifically focusing on progress on results achieved by the Program from 2013-14 to 2017-18.

The evaluation utilized various methods to collect and analyse program documents, performance and financial data, relevant literature, interviews with internal and external stakeholders, a survey of program recipients, and case studies on specific projects. The detailed evaluation methodology is in Annex A.

3.0 AGRIRISK INITIATIVES PROGRAM BACKGROUND

3.1 Objectives

As part of the Growing Forward 2 (GF2) Business Risk Management (BRM) initiative, AgriRisk aims to support the development and adoption of new provincial or territorial government or private sector agricultural risk management tools and strategies. The core BRM suite of programs is designed to support GF2 objectives by helping farmers manage risk due to severe market volatility and disaster situations. AgriRisk has a broader scope and is outside the core BRM suite of programs, which includes AgriInsurance, AgriStability, AgriInvest and AgriRecovery.

While AgriRisk is completing its first iteration at the end of 2017-18, the Program is a successor to the Private Sector Risk Management Partnerships Program (2003 to 2008) which was part of the Agricultural Policy Framework, the framework preceding Growing Forward and GF2. The Private Sector Risk Management Partnerships Program was a federally delivered and funded program that sought to facilitate the participation of private sector stakeholders in addressing agricultural risks not covered by existing tools or programs. Specifically, the Program supported and funded recipients in research and delivery as well as developing relationships with private financial services industry.

Given growing interest among stakeholders in the financial services and agricultural industries, and changes in coverages of BRM programs like AgriStability and AgriInvest, AgriRisk was introduced in 2013-14 to respond to this growing need, incorporating lessons

from the experience of the Private Sector Risk Management Partnerships Program.

AgriRisk seeks to increase producers' ability to address the risks they face by facilitating the development and adoption of private-sector or other producer-paid agricultural risk management tools. AgriRisk aims to achieve this objective through providing financial and non-financial support to recipients. Financial support is intended to cover costs related to development or delivery of risk management products and tools. The non-financial support can include providing to provincial and territorial governments, financial services industry or other institutions technical advice and access to networks of expertise. Additionally, given the variance of capacity of recipients, this support can include helping recipients fulfill their responsibilities and duties for project management, including referrals to professional service providers for activities such as actuarial analysis, modelling, and other forms of expertise.

Intended program recipients can include the following:

- Not-for profit industry organizations representing agricultural and agri-business stakeholders, such as producer associations, commodity groups, and farm services associations
- Cooperatives, mutual insurance companies, and reciprocals
- Academic institutions
- Provincial and territorial governments

3.2 Activities

AgriRisk supports the agricultural sector through two streams. The first is the Research and Development (R&D) stream, which provides financial assistance for up to five years for R&D of new private risk management products, including insurance products and services. These recipients tend to be at the earlier stage of the product development cycle, with projects ranging from an initial risk assessment of a sector to the development of a particular model or product. Eligible activities include risk assessments of sectors, data collection and analysis, product development, and modelling.

The second stream is the Administrative Capacity Building stream, which supports pilot administration during the initial years of delivering new risk management tools. This stream contributes to attracting and securing private sector support by demonstrating the operational viability of new risk management products. These recipients tend to have a product, tool or service that is already ready for delivery but require additional capacity to deliver the risk management tool. Eligible activities include marketing activities, human resources recruitment, start-up costs, and acquiring equipment.

While the R&D stream existed in the Private Sector Risk Management Partnerships program, the second stream is unique to AgriRisk and was introduced after experiences in the Private Sector Risk Management Partnerships program illustrated a need for additional support for delivery and promotion. Annex B provides a logic model on the overall program.

3.3 Application and Claims Process

The application process consists of three different stages. The first stage requires initial approval of the project concept on the basis of the eligibility of the applicant, the benefits of the project beyond the immediate recipient, and a public good or benefit for the sector. After this initial approval, prospective recipients submit a work plan and budget.

The third stage requires a technical review by three internal subject matter experts relevant to the project's target risk, region, and/or sector. These three stages are then followed by an approval and subsequent contribution or grant agreement that outlines the agreed upon activities, deliverables, and deadlines. The approval of AgriRisk projects follows a graduated system designed around project size and resultant corporate risk. Projects under \$500,000, between \$500,000 and \$2-million, and over \$2-million are approved by the Director General, Assistant Deputy Minister and Minister respectively. Exceptions to this approval system include Administrative Capacity Building projects and other special cases requiring Ministerial approval regardless of funding size.

3.4 Resources

The budget allocated for AgriRisk was initially \$60-million over five years but the allocated grants and contributions were later reduced to \$57,288,486. The R&D stream is federally funded, while the Administrative Capacity Building stream is cost-shared with the provinces and territories on a 60:40 basis. Table 1 presents the federal government budgeted resources and actual expenditures from 2013-14 to 2017-18. The program had a variance of \$19,482,682 over the five years and lapsed 34 percent of the budget. The program went from lapsing 38 percent in the first two years to lapsing 13 percent in the last year.

Table 1: AgriRisk Initiatives Program Budget/Expenditures, 2013-14 to 2017-18 (\$)

Year	Budget	Expenditures	Variance
2013-14	\$4,204,988	\$2,599,156	\$1,605,832
2014-15	\$7,454,988	\$4,657,488	\$2,797,500
2015-16	\$12,455,806	\$6,366,339	\$6,089,467
2016-17	\$16,213,398	\$9,375,875	\$6,837,523
2017-18*	\$16,959,306	\$14,806,946	\$2,152,360
Total	\$57,288,486	\$37,805,804	\$19,482,682
Source: Program financial data			
*Data to January 2018.			

For projects in the R&D stream, the maximum contribution one recipient can receive per fiscal year is \$500,000. For projects in the Administrative Capacity Building stream, the maximum contribution one recipient can receive per fiscal year is \$5,000,000. This may include an additional one-time seed funding of \$750,000, which is repayable or conditionally repayable contingent on not-for-profit status and whether the repayment undermines product viability.

To ensure that project recipients have an incentive for successful completion and development of project activities, project recipients in the R&D stream are sought to contribute 30-40 percent of estimated project costs either in cash or in-kind. For the

recipients in the Administrative Capacity Building stream, a similar recipient contribution will be sought at 10 and 50 percent in cash or in-kind for non-profit and for-profit recipients respectively. However, the remaining project costs after the recipient contribution will be cost-shared based on the normal federal: provincial/territorial arrangement (60:40), resulting in 40 percent contributed by the relevant provincial/territorial government.

4.0 PROGRAM RELEVANCE

4.1 Continued Need

AgriRisk supports the agricultural sector in developing and implementing risk management products and strategies to address emerging and diverse risks and barriers not sufficiently covered by existing products.

New Agricultural Risk Management Products

As noted in the 2017-18 AAFC Departmental Plan, the Canadian agricultural sector is becoming more complex, diverse and interconnected with global markets. The sector faces a variety of risks such as changes in commodity and input prices, exchange rates, energy costs, and climate change. The growing sophistication in production and sales at the producer and business level further changes the significance of certain risks for farmers.¹ Without products and services to manage emerging risks, the livelihood of producers could be threatened.

Traditional and established risk management products are not sufficient to address the wide range of risks faced by agricultural producers. Examples of traditional risk management products include publicly delivered production insurance and private insurance on farm buildings and equipment, and government income support and advance payment assistance programs (i.e., core BRM programs). The evaluation found that individual producers and producer organizations frequently expressed interest in additional risk management tools to address specific risks not covered by government programming or existing private risk management products. AgriRisk fulfills a need as it funds and supports projects to develop products and services that target specific diverse risks not covered by BRM programming or the private sector. Due to BRM's transition in GF2 to assisting producers in dealing with severe market volatility and disaster, AgriRisk focuses on funding product development that can assist producers to manage normal agriculture business risk. By increasing awareness about emerging unforeseen risks and providing access to new products and services to manage normal business risk, AgriRisk helps to build industry capacity to manage risks such as weather or market fluctuations and reduce reliance on government support.

Barriers to Developing and Delivering New Products

While it is recognized that stakeholders in the agriculture and financial services industries develop risk management products, there are impediments and challenges unique to the Canadian agricultural sector, such as a small Canadian market, lack of technical

¹ Gervais, J.-P. (2014). Growing Complexity and Greater Sophistication in Agriculture. Canadian Journal of Agricultural Economics. 62, 1–5.

expertise, or access to capital. Stakeholders such as non-profit organizations, provincial/territorial governments, and private providers face barriers in developing and delivering agricultural risk management products. These barriers include adverse selection (i.e., higher risk producers being more likely to purchase insurance), moral hazard (i.e., producers engaging in more risk-taking decisions when they are insured), and high costs associated with the R&D and implementation. The resulting high premiums relative to government products make producers less likely to purchase private risk management products. Other constraints, such as highly correlated losses associated with price insurance products, can also impact profitability for the financial services industry, since the losses tie-up a large sum of capital in the event of a payout. As a result, the financial services industry is hesitant to develop private risk management products partially due to their relative lack of exposure and expertise with agriculture.²

These barriers make it costly to develop new risk management products and require years to sustainably implement. Almost all survey respondents indicated AgriRisk funding was useful in the research and development of their products and services. Sixty percent of respondents noted their projects would not have proceeded without AgriRisk due to few alternative funding sources. Most non-profit industry associations and provincial/territorial governments lack access to the required funding to undertake projects of this size (i.e., \$388,773 average budget for R&D projects and \$1.6-million average budget for Administrative Capacity Building projects). Recipients indicated that AAFC helped to leverage different funding partners and provided necessary credibility to access required data for their projects. In the absence of AgriRisk funding, projects would not have had the same technical expertise, scope, or timing.

Even after developing new agricultural risk management products, their profitability and sustainability takes time as producers develop understanding and awareness of new tools and begin using them consistently. According to a 2016 survey by Farm Credit Canada, only one-third of Canadian producers and agribusiness operators have a formal risk management plan, which Farm Credit Canada attributes to gaps in awareness and understanding of how to manage business risks.³

The evaluation found that new agricultural risk management products can take years to provide enough stability in their use and uptake to be of interest to private insurers. The involvement of provincial/territorial governments and AgriRisk to support the development of administrative capacity to deliver new risk management products is necessary as this expertise is generally not found in the agricultural sector, and financial services industries typically limit take-up until products demonstrate sustainability. In response to these unaddressed gaps, highlighted by experiences of the Private Sector Risk Management Partnerships Program, AgriRisk provides research and development

² Ker, A. P., Barnett, B., Jacques, D. and Tolhurst, T. (2017). Canadian Business Risk Management: Private Firms, Crown Corporations, and Public Institutions. *Canadian Journal of Agricultural Economics*; Goodwin, B.K. and Smith, V.H. (2013). What Harm is Done By Subsidizing Crop Insurance? *American Journal of Agricultural Economics*, 95(2), 489-497. <https://doi.org/10.1093/ajae/aas092>; Goodwin, B. K. (2001). Problems with Market Insurance in Agriculture, *American Journal of Agricultural Economics*, 83. 643-649, <https://doi.org/10.1111/0002-9092.00184>; Barnett (2014). Multiple-peril crop insurance: successes and challenges, *Agricultural Finance Review*, 74(2), 200-216. <https://doi.org/10.1108/AFR-11-2013-0040>.

³ Farm Credit Canada. FCC survey shows strong interest in risk management (2016). <https://www.fcc-fac.ca/en/about-fcc/media-newsroom/news-releases/2016/fcc-survey-shows-strong-interest-in-risk-management.html>.

with necessary administrative capacity in the short-term to make private products and strategies more sustainable in the long-term.

4.2 Alignment with Industry Needs and Priorities

AgriRisk programing aligns with industry needs and priorities by addressing risks related to price and market, weather and climate change, production, and diseases and pests.

An analysis of program funding by risk and peril against risks identified in three different producer surveys provides evidence of alignment between AgriRisk programming and the concerns of producers and producer organizations. Results from the 2016 OAE BRM Producer Survey, 2016 Farm Credit Canada Survey, and 2017 Strategic Issues Survey completed by Strategic Counsel illustrate that the types of risks and perils most frequently mentioned by producers are similar to those that received the highest proportion of AgriRisk funding (Table 2). Weather and price risks were the top concerns for respondents which correspond to the types of projects receiving the top share of AgriRisk funding. Other risks commonly identified, such as production risks, and disease and pest risks, received a moderate share of AgriRisk funding. Seventy-five percent (n=20) of respondents to the survey developed for this evaluation indicated their projects responded to concerns from producers or other agricultural stakeholders.

Table 2: Alignment with Industry Needs and Priorities

2016 BRM Producer Survey	2016 Farm Credit Canada Survey	2017 Strategic Issues Survey	AgriRisk projects approved by risk/peril (% of AAFC funding)*
<i>Most frequently mentioned types of risk/peril (% of respondents)</i>			
- Weather risks (63%) - Rising input prices/production costs (48%) - Changing government policy (33%) - Value of Canadian dollar (32%) - Decreasing output prices (28%)	- Price risks (52%) - Production risks (43%) - Regulatory risks (43%)	- Weather risks (48%) - Price risks (34%) - Rising input prices/production costs (27%) - International factors (21%) - Disease and pest risk (20%)	- Price and market risks (48%) - Weather and climate risks (18%) - Production risks (11%) - Disease and pest risk (10%) - Other (14%)

Source: *Program Project Documentation.

Note: Respondents could choose from more than one risk resulting in a total that exceeds 100%.

Case studies (Annex C) provide examples of projects that address industry gaps in agricultural risk management. The Crop Data and Price Reporting project undertaken by the Alberta Wheat Commission aims to address a gap in pricing information, following the abolishment of the Canadian Wheat Board. Similarly, the Western Livestock Price Insurance Program undertaken by provincial governments in British Columbia, Alberta, Saskatchewan, and Manitoba is intended to address price and market risks in the beef and hog industries. The Agrométéo project undertaken by the Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec focuses on the launch of a tool that helps the agricultural sector make better decisions and manage climate and pest risks.

4.3 Alignment with Government and AAFC Priorities

AgriRisk aligns with departmental and federal government priorities and objectives, contributing to priorities such as innovation, climate change, and underrepresented groups in farming.

The objectives of AgriRisk align with AAFC priorities and objectives, particularly with respect to supporting the sector in developing and adopting new agricultural risk management solutions. AgriRisk objectives are to support the development and adoption of new private agricultural risk management tools, products, and services, as well as to expand the role and increase the engagement of the private sector financial services industry in providing risk management products to the agricultural sector. These objectives align with AAFC's strategic outcome of a competitive and market oriented agriculture, agri-food and agri-based products sector that proactively manages risk. AgriRisk supports proactive risk management by encouraging stakeholders to take greater responsibility in developing and implementing new risk management products and strategies which are complementary to the BRM core suite of programs. AgriRisk contributes to this outcome by supporting projects which build capacity and awareness about risk.

AgriRisk aligns with federal government priorities related to climate change and underrepresented groups in farming. The Program aligns with the federal government focus on helping the sector to adjust to climate change, as outlined in the Minister of Agriculture and Agri-Food Mandate Letter, as 18 percent of total AgriRisk funding was allocated to address climate and weather-related risks. AgriRisk supports Indigenous, Northern and other under-represented groups in farming as outlined at the 2017 Annual Meeting of FPT Ministers of Agriculture, by funding five projects that focus on risks faced by Indigenous and Northern farmers.

4.4 Alignment with Federal Roles and Responsibilities

AgriRisk provides information, credibility, and financial support for the development and implementation of new risk management tools that can reduce government payments from other programs.

Under the *Farm Income Protection Act*, the federal role in business risk management is to partner with provinces and territories to protect the incomes of producers through programs such as AgriInsurance, AgriStability and AgriInvest. AgriRisk, while part of the BRM suite, receives legislative authority from the *Department of Agriculture and Agri-Food Act* to support research and thus by extension, development in agricultural risk management that cannot be done within the authorities of *Farm Income Protection Act*. The BRM programs modified their level and type of support to reflect this new role and limit government involvement in providing support for normal business risk. Increased levels of government involvement can distort farmer behaviour and prices, affecting innovation and adaption at the producer and industry level. Federal-provincial-territorial roles are shifting towards providing disaster level support and encouraging producers and the private sector to develop tools and strategies to manage normal business risk.

With this shift, the agricultural sector is increasingly responsible for managing normal

business risks. The Organisation for Economic Co-operation and Development, in a 2011 review of risk management in Canada, recommended federal, provincial and territorial governments support the sector in this transition by financially supporting innovation and coordinating action and information.⁴ AgriRisk aligns with this changing role by providing information, credibility, and funding to support the research and development of tools that target risks not covered by BRM programs.

The evaluation evidence indicated AgriRisk is better suited for this role compared to other stakeholders such as provincial/territorial governments, industry associations and the financial services industry due to its resources, networks, and expertise. The financial services industry plays a role in developing and implementing new agricultural risk management tools but there are still gaps due to a lack of experience with the agricultural sector. Provincial/territorial governments play a key role in supporting the implementation of new agricultural risk management tools in their jurisdictions, but tend to lack sufficient resources and networks to support R&D associated with agricultural risk management. Industry associations conduct research identifying industry risks and needs, but lack sufficient risk management expertise and funding to develop and implement tools to address those risks.

By providing financial and non-financial support to projects both at the development and implementation stage, AgriRisk has the potential to build industry capacity and awareness in using private risk management tools. This aligns AgriRisk with the evolving federal roles of industry taking care of normal risk and governments stepping in for severe risks.

4.5 Complementarity with Other Federal Government Programs

AgriRisk complements other federal and provincial programs by supporting industry in developing their own risk management tools to reduce the requirement for government involvement.

No other federal government programs have the same mandate as AgriRisk to facilitate and support the development and implementation of private agricultural risk management products and strategies. Evaluation evidence indicated AgriRisk is unique and complements comparable programs. A few programs were identified which overlap with AgriRisk, but have different scope or focus (Table 3).

Table 3: Complementarity of AgriRisk with Other Similar Programs

Similar Program	Similarities and Differences with AgriRisk
AAFC Core Business Risk Management (BRM) Programs	Assist producers with business risks with a focus on severe market volatility. Does not focus on developing and implementing tools to address normal business risks.
AAFC Canadian Agricultural Adaptation Program (CAAP)	Provides funds to sectors to respond to new and emerging issues. Compared to AgriRisk, limited funding to develop and implement new agricultural risk management tools.

⁴ OECD. Risk Management in Agriculture in Canada (2011).

Similar Program	Similarities and Differences with AgriRisk
AAFC AgriCompetitiveness Program	Provides funding to similar organizations but does not cover and allow the same types of expenses and the same activities.
AAFC AgriInnovation Program (AIP)	Provides funding for R&D activities that focus on commercialization and adoption. Universities cannot apply directly for funding.
Provincial government funding for industry needs and risk assessments	Most programs are commodity-specific assessments of industry needs and have limited range of risks and industries to be targeted.

Changes to BRM programs under the GF2 Framework shifted more responsibility on producers to manage more normal business risk. AgriRisk complements these changes to core BRM programming by providing support for the development and implementation of new industry-led risk management tools that target niche or specific risks. The Western Livestock Price Insurance Program responded to significant price risk for livestock producers not fully covered by core BRM programs by conducting research and development supported by AgriRisk's predecessor. AgriRisk now supports the implementation of livestock price insurance in western provinces to mitigate price volatility for cattle producers. AgriRisk complements these changes to BRM by supporting the sector in increasing its awareness and exploring different solutions to various risks. AgriRisk also complements core BRM programs because some tools and research developed under AgriRisk make other BRM programs more efficient and relevant. For example, the Price and Data Quotes (PDQ) tool developed under the Crop Data and Price Reporting project benefits programs such as AgriStability as the price data can be used to verify claims for the loss of income.

5.0 PERFORMANCE

5.1 Activities and Outputs

AgriRisk is progressing towards achieving its output to promote the Program.

As of January 2018, 58 AgriRisk projects worth \$34.3-million have been approved. While the Program received 85 applications, some projects were not eligible or are pending for the next iteration of AgriRisk. AgriRisk approved \$15.6-million in funding for 10 Administrative Capacity Building projects and \$18.7-million in funding for 48 R&D projects. For detailed information on AgriRisk funding, see Annex D.

AgriRisk met its target of 12 presentations and meetings to promote the Program to industry and stakeholder groups (Table 4). The evaluation found that various promotion activities took place, such as presentations, the creation of a website, and the development of other information products. However, there is evidence to suggest that these activities were not very successful in the initial years and may have contributed to a lag in applications. Only seven percent of projects from the Program period were approved in the first two years (2013-14 and 2014-15), as different factors such as limited announcements about the Program and a focus on program implementation hindered promotional activities. Evaluation evidence indicates promotion efforts were further

constrained due to a lack of awareness of the Program among AAFC Market and Industry Services Branch employees and provincial/territorial government counterparts as the program was new and differed in mandate and programming compared to traditional BRM programs. Promotional activities improved in later years with events such as the AgriRisk Forum, a periodic conference to promote the Program and facilitate networking. These efforts contributed to increasing project applications and approvals since over 60 percent of all projects from the Program period were approved in the last two years (2016-17 and 2017-18). It is expected the Program will continue to approve and disperse funding before March 31, 2018, to enable it to meet the targets.

Table 4: Achievement of AgriRisk Outputs (April 2013 to January 2018)

Program Output	Indicator	Target	Summary of Achievements	Status
Presentations to stakeholder groups, website, information products	Number of meetings and presentations	12	Program conducted presentations and created a website and other information products. Promotion efforts were not very successful in the initial years but improved over time.	Met
Project reports: Risk assessments; research studies; business cases for new tools	Reports received from funded projects: Quarterly progress and financial reports, annual and final project reports	90%	Few progress reports and final project reports were received since over 60% of projects were approved in 2016-17 and 2017-18.	On track
Project funding, financial and performance reports, compliance audits, etc.	Grants and contributions funding approved for and spent by projects	70%	\$33.4-million committed; 63% of the planned \$52.6-million in grants and contributions for 2013-14 to 2017-18.	On track
	Percentage of projects meeting 80% of project objectives on time and on budget	90%	85% of projects reviewed are on track to complete their project objectives on time	On track

Source: AgriRisk Program Financial Data.

AgriRisk committed \$33.4-million in grants and contributions resulting in 63 percent of the planned \$52.6-million for 2013-14 to 2017-18 (slightly less than the target of 70 percent). AgriRisk anticipates committing more funds until the Program closes in March 2018 to meet the target. Approved projects are progressing with 85 percent of projects reviewed on track to complete their objectives on time (close to the target of 90 percent). Project recipients and stakeholders surveyed for the 10 case study projects, on average, indicated their projects are successful in achieving their objectives to date.

5.2 Industry Awareness of Current Risk Management Tools

AgriRisk continues to increase industry awareness of current risk management tools. However, producer experience and familiarity with new tools will take more time.

Industry stakeholders, such as producer associations and commodity organizations, increased awareness about risk management by leading and participating in R&D and Administrative Capacity Building projects. Almost all projects reviewed included planned

activities to share project updates and results. Among the 20 project recipients surveyed, 80 percent had undertaken outreach and marketing activities including presenting at events and conferences (e.g., producer meetings, annual general meetings and trade shows), and sharing information through networks, industry publications, and social media. Fifty-five percent of these recipients indicated that their outreach activities were successful in raising awareness, while several indicated that it was too early to tell.

Examples of successful awareness raising activities were identified in the case studies. The Agrométéo project raised awareness about the project results through industry meetings, conferences and publications; from October 2015 to March 2017 the project undertook 27 instances of outreach to 992 participants. The HydroGeoSphere Modelling Platform Development for the Assiniboine River Basin project undertaken by the Manitoba Forage and Grasslands Association created "The Grasslander", a 24-page magazine to share the results of the project. One thousand copies of the magazine were distributed. The project was featured in an AAFC profile online.

Although awareness is increasing, industry and producer experience and familiarity necessary for increased uptake of new risk management tools will take time. Case studies show the need for new risk management tools is closely connected to the need to increase understanding about risk management among producers. For example, Farm Management Canada's AgriShield project is developing a tool which will provide farmers with improved understanding of risk management and business management strategies. By supporting these projects, AgriRisk increases awareness of current risk management and can change how risk management is perceived in the sector, influencing uptake of new tools.

5.3 Industry Access of New or Expanded Risk Management Tools

AgriRisk is making some progress in increasing industry access to new or expanded risk management tools but is hampered by the limited number of Administrative Capacity Building projects.

There are several examples of both R&D and Administrative Capacity Building projects that increased industry access to new or expanded risk management tools. Projects have developed new tools which are now being used by industry and the research undertaken by projects could contribute to the development of risk management tools in the future.

Case study examples include:

- The Sustaining the Poultry Industry in the Face of Infectious Disease Outbreaks Utilizing Movement Permits and Risk Transfer Programs R&D project, undertaken by the Chicken Farmers of Ontario. This project developed an economic and risk exposure model which could be used to develop an infectious disease insurance product. The research combined an existing disease spread model (developed by the Canadian Food Inspection Agency and other collaborating stakeholders) with a loss quantification model that calculates the value of the birds that would be lost. This model would allow an insurance provider to determine the coverage and premiums based on the estimated cost of the insurance if there was an infestation

in a given year. The Canadian Food Inspection Agency can use this information to help them enhance biosecurity standards, reduce the cost of the insurance premiums, and improve coverage for producers.

- The Guy Carpenter Professorship in Agricultural Risk Management and Insurance project, undertaken by the University of Manitoba. This project developed new agricultural insurance and risk management models and disseminated these tools at the government and producer level. This research quantifies risks with more precision and reduces cross-subsidization of premiums. Examples of research tools developed through the project include:
 - Optimal Loss Experience Forecasting Model and (Re)Insurance Pricing will help improve the accuracy of ratemaking for crop insurance contracts and may be useful in furthering the development and viability of index-based crop insurance products.
 - Spatial Weather Forecasting Model will improve statistical modeling for weather, climate and environmental variables.
 - Livestock Mortality Insurance will provide an improved approach for computing livestock mortality insurance premiums.
 - Optimal Crop Insurance Risk Transfer will help sufficiently diversify risk and operate a stable crop insurance program.

AgriRisk faced challenges in increasing industry's access to new or expanded risk management tools due to a low number of Administrative Capacity Building projects. As only 10 projects were funded in the Administrative Capacity Building stream, funds were diverted to the R&D stream resulting in a higher than expected number of projects (48). This shift could be a reflection of the relative lack of experience and familiarity of the agricultural sector with new risk management tools and the extent to which these tools are ready to be launched. This may denote a requirement of increased engagement and coordination with stakeholders such as provincial governments, agriculture associations and financial services industry to ensure that prospective tools are relevant. Evaluation evidence highlights other factors limiting the uptake of Administrative Capacity Building projects such as provincial and territorial government resource constraints and project approval delays.

Of the 20 projects reviewed in surveys and case studies, most projects plan to develop or market their product further. Many projects are exploring options to make their product sustainable following AgriRisk support. Some projects plan to apply for the next round of AgriRisk funding to expand on the previous project and build on the momentum created. A few projects have already led to spin-off projects in other jurisdictions (e.g., a similar program to the Western Livestock Price Insurance Program and a similar tool to Agrométéo are being explored in Atlantic Canada).

Interviewees were optimistic that future iterations of AgriRisk would yield more applications for Administrative Capacity Building projects as existing R&D projects progress to implementation and the sector's awareness increases.

5.4 Partnerships between the Agricultural and Financial Services Industries

AgriRisk made progress in strengthening the partnership and engagement between the agricultural and private risk management sectors through projects and venues for increased interaction.

Fifty percent of projects reviewed aimed to either significantly involve or engage stakeholders from the financial services industry. Not all projects involved private sector engagement in their current iteration because many were focused on earlier stage R&D activities such as research, risk modelling, and cost scenarios. Private risk management firms would likely be more engaged with the availability of successful business cases and potential profit.

Barriers to making insurance and other risk management products viable constrain private sector involvement in agriculture. Some examples include competition from government insurance products, high premiums coupled with variable producer uptake, and the inability to cost-effectively monitor risky behaviour. Legal complexities associated with agricultural risk management tools may be prohibitive to private risk management firms. To reduce these barriers, AgriRisk R&D projects are improving data collection, monitoring, and innovating financial and actuarial modelling.

Currently, the bulk of private sector interest in agricultural risk management comes from the reinsurance industry which is increasingly interested in agricultural risk to diversify their funds. Case studies identified increased interest by the reinsurance industry. The Guy Carpenter Professorship in Agricultural Risk Management and Insurance project undertaken by the University of Manitoba was developed with support from Guy Carpenter & Company, one of the largest reinsurance intermediaries in the world. Along with the \$500,000 grant provided by AAFC, Guy Carpenter provided \$750,000 to create a Research Chair. The project leveraged an additional \$794,200 in research funding from various other grants and organizations from the reinsurance industry. The project undertaken by the Chicken Farmers of Ontario had positive interactions with the reinsurance industry, which welcomed the robust risk modelling data being made available.

Relationships among agricultural risk management stakeholders were strengthened through ongoing information sharing activities such as the AgriRisk Forum and other events. The AgriRisk Forum is held periodically and aims to promote networking among project recipients and the financial services industry, as well as serve as an exchange of knowledge and experience among all stakeholders, including international agricultural and finance groups and governments.

5.5 Industry Adoption of New or Expanded Risk Management Tools

AgriRisk is progressing towards increasing industry adoption of new or expanded risk management tools, though it is too early to measure the full extent of adoption of these tools.

Since most projects are in development and there were a limited number of Administrative Capacity Building projects, it is too early to measure the full extent to which the Program has increased industry and stakeholder adoption of new or expanded tools. Given the ebbs and flows of adoption behaviour for new technologies or tools, it is difficult to acquire an accurate rate of adoption for a product until many years after its launch. It is estimated that adoption will increase in the next few years as more tools develop and awareness of agricultural risk management increases.

Limited evidence from the survey and case studies shows signs of adoption and early interest in tools. Adoption rates will be measured by the Program after the end of program implementation (March 31, 2018). Even then, it will take successive surveys and years to accurately assess the rate of adoption. Seventy-five percent of survey and case study recipients indicated some interest by producers in using their tools. Examples from case studies include:

- Western Livestock Price Insurance Program had good uptake in four provinces. Producers purchased over 5,300 policies for the period of April 1, 2017 to October 31, 2017, representing over \$800-million in corresponding insured liabilities (i.e., value of production that is covered), across the four provinces and subsectors. Though uptake has varied and the Program is not sufficiently established to be fully taken over by the private sector, several provinces indicated they expect to see continual growth and adoption.
- Agrométéo project has seen a steady increase in the use of the online tool. Use increased from just 227,261 hits per month in July 2012 to more than 8,197,490 hits per month in July 2016; and increased from 8,909 visitors per month in July 2012 to almost 19,959 visitors per month in July 2016. Agrométéo allow farmers to manage risks through improved weather coverage and decision-making.
- Crop Data and Price Reporting project has seen high level of uptake, providing improved price transparency for various grains and helping farmers make more informed marketing and planting decisions. As of October 2017, there was an average of 600-800 website hits per week and approximately 15,000 unique users, of which 2,400 are registered users. Users include farmers, grain buyers, experts and governments. These stakeholders use the tool to inform their work such as market reports or benchmarks for competitive pricing.

There is limited evidence regarding general interest and adoption for some AgriRisk projects from other stakeholders. Seventy-five percent of survey and case study recipients reported further interest in their product by other stakeholders, most commonly governments and public agencies such as provincial crop insurance organizations, as well

as federal government scientists, academics, and Indigenous community leaders. For example, provincial crop insurance companies can use AgriRisk-funded tools such as the PDQ tool to verify claims and obtain more accurate prices for commodities in Western Canada. A pricing simulation by the Agriculture Financial Services Corporation involving a \$0.01 change in price of the crop varieties reported by this tool showed corresponding cost savings to taxpayers of over \$300,000 through more accurate insurance payouts for producers in Western Canada.

5.6 Economy and Efficiency

AgriRisk maintains low operational costs and offers useful non-financial support to project recipients, and program delivery has improved over time, although there are still delays in project processing.

AgriRisk had fewer program commitments than planned for 2013-14 to 2017-18. As indicated in Table 5, AgriRisk committed \$33.4-million in grants and contributions, which was 63 percent of the planned \$52.6-million. Table 5 describes the funding fluctuations in planned and committed funding throughout the Program. Funding was lapsed partially due to challenges in the project approval process and limited awareness of the Program.

In terms of operational costs, the Program is largely delivered in an efficient manner. Over the last five years, the Program expended over \$4.4-million in non-program operational costs, representing 13 percent in operational costs as a proportion of committed grants and contributions.

Table 5: Planned and Committed Funding for AgriRisk 2013-14 to 2017-18

Fiscal Year	Planned Grants and Contributions	Committed Grants and Contributions	Committed/Planned Ratio	Non-program operational costs	Administrative Ratio
2013-14	\$3,250,000	\$2,346,393	72%	\$252,763	11%
2014-15	\$6,500,000	\$4,118,823	63%	\$538,665	13%
2015-16	\$11,500,000	\$5,370,710	47%	\$995,629	19%
2016-17	\$15,300,000	\$8,384,065	55%	\$991,810	12%
2017-18*	\$16,050,000	\$13,180,290	82%	\$1,626,656	12%
Total	\$52,600,000	\$33,400,280	63%	\$4,405,523	13%

Source: AgriRisk Program Financial Data.

*To January 2017.

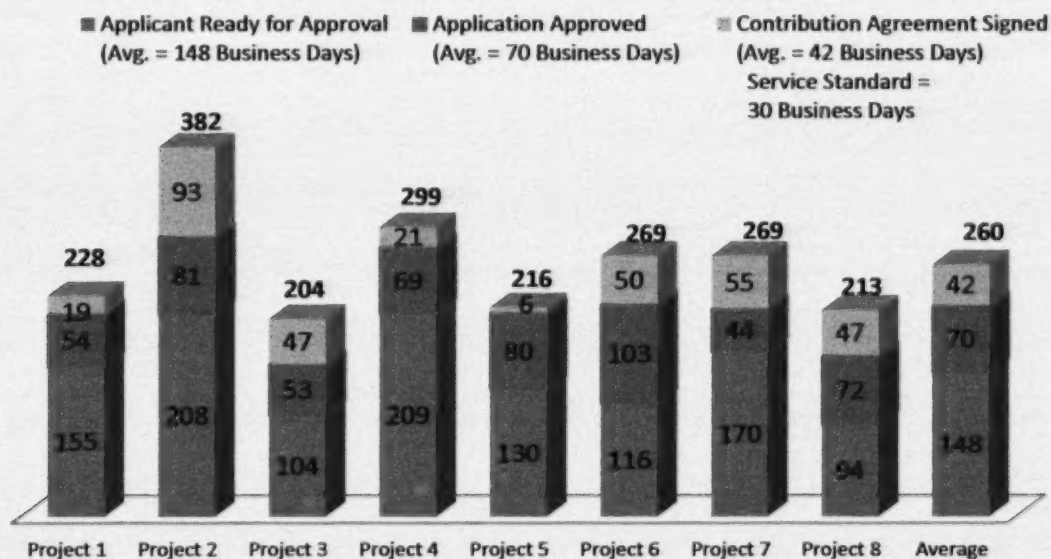
Generally the non-financial support provided by AgriRisk is viewed as helpful and of high quality. The non-financial assistance was primarily in the form of augmenting understanding of the Program and application process, clarifying project scope and objectives, and connecting recipients to other partners or technical expertise (e.g., scientific, actuarial, and legal expertise). The electronic reporting templates have been helpful but a few recipients experienced technical challenges (e.g., templates were not consistent with the online portal word limits) and there was a learning curve in becoming familiar with these templates.

Project Approvals

Delays in project approvals constrained program efficiency and resulted in fewer funds committed than planned. At the time of the evaluation, 34 projects had been approved by the program; an additional 24 have since been approved. Based on a review of the 34 projects, AgriRisk took an average of 285 business days from the initial application to the signing of the contribution agreement, with 228 of those 285 business days spent readying an application for approval and finalizing the approval; the final 57 days were to complete the contribution agreement. The Program reduced the average overall time from 375 business days in 2013 to 225 business days in 2016, as a result of changes to the number of staff utilized and the required levels of authority for approvals.

Based on a detailed analysis of a sample of eight projects (Figure 1), the evaluation found most of the delays occurred before an application was ready for approval. In this detailed sample, AgriRisk took an average 260 business days for the entire process; 184 of those 260 business days readying an application for approval. Evaluation evidence found that projects were assessed and approved using the same number of steps and approvals for repeat AAFC recipients and low-dollar funding amounts as for new applicants and higher-dollar amounts. Interviews described frequent back-and-forth communication between staff and recipients concerning revisions or clarifications to applications and claims, indicating possible inefficiencies in program processes. These delays negatively impacted project implementation by compressing timelines and constraining cash flow, possibly discouraging prospective program applicants.

Figure 1: Approval Process for a Sample of Eight Projects (Business Days)



Source: OAE Internal Audit, 2017

The original planning for human resource capacities contributed to delays. The Program anticipated funding primarily more Administrative Capacity Building projects and only a small number of R&D projects, requiring a small staff complement of three to manage projects, but the reverse occurred. Many of these unanticipated R&D project applicants

lacked capacity in applying for grants and contributions and required more guidance from AAFC staff. Staff members in the first few years were temporarily loaned from other programs. Responding to these constraints, by 2017-18 the staff complement increased up to 15 (full-time and part-time) with additional support from the Farm Income Protection Division.

The approval process initially required standardized approvals at the ministerial level for all projects, regardless of size, further causing delays. The approval process was later revised to provide delegated authority based on the level of funding. Likewise, increases in the level of recipient contribution at the onset of the Program complicated approvals in the initial year by requiring revisions to contribution agreements. While the required 33 percent (cash and in-kind) recipient contribution was generally well received, smaller non-profit recipients struggled to raise funds from industry when there was no immediate or direct return on investment or ability to raise in-kind contributions when they had limited staff.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 AgriRisk Relevance

AgriRisk fills a continued need to support the development and implementation of new agricultural risk management tools that address emerging and diverse risks faced by the Canadian agricultural sector. Programming aligns with the needs and priorities of the Canadian agricultural sector by addressing risks that most concern producers. Given the barriers for new products, AgriRisk support remains relevant.

AgriRisk's mandate and programming aligns with federal priorities, roles and responsibilities such as innovation, climate change and underrepresented groups in farming. The Program further complements a changing federal role in agricultural risk management, emphasizing industry involvement in managing normal business risk through its support for research, development, and implementation of private products.

6.2 AgriRisk Effectiveness

AgriRisk is on track to meet its three outputs and is making progress towards the remaining output and outcomes. Promotional activities were not successful in the initial years and may have contributed to a lag in applications and project approvals. The Program could build on the success of the AgriRisk Forum to increase awareness.

AgriRisk is increasing industry awareness of new agricultural risk management tools through industry participation and outreach activities in projects. The Program is making progress in increasing industry access to new or expanded risk management tools. Progress was limited by a low number of Administrative Capacity Building projects as it takes time for producers and organizations to move from R&D to pilot administration. The limited number of Administrative Capacity Building projects diverted funds to more R&D projects given sector needs. While AgriRisk made progress in strengthening partnerships between the agriculture industry and the private risk management sector through project activities, more stakeholder engagement and coordination in project development may

increase familiarity of new risk management tools and increase the likelihood of launching tools.

The Program made progress in increasing industry adoption of new or expanded business risk management tools. Due to the early stage of most projects in the development process and the limited number of Administrative Capacity Building projects, it is too early for the evaluation to measure the full extent to which the Program has increased adoption in this evaluation. Given the low number of projects in the Administrative Capacity Building stream and its importance for program outcomes, Administrative Capacity Building requirements may require reconsideration to increase uptake. The low number of Administrative Capacity Building projects may imply a need for stronger and earlier role for stakeholders from the agricultural and financial services industry to ensure that prospective tools are attractive to potential implementers and users.

Recommendation 1: The Assistant Deputy Minister, Programs Branch, should expand AgriRisk's promotional efforts to increase awareness of the Program.

Recommendation 2: The Assistant Deputy Minister, Programs Branch, should review the requirements of the Administrative Capacity Building stream to increase the access of projects.

Recommendation 3: The Assistant Deputy Minister, Programs Branch, should incorporate fora that use industry expertise, networks and experience, such as external program advisory councils or involving external expertise in the program to increase industry coordination and engagement.

6.3 AgriRisk Efficiency and Economy

AgriRisk maintains low operational costs and offers useful non-financial support to project recipients. Though there were some challenges with delivery, AgriRisk identified and addressed these through program adjustments. Challenges included delays in project approvals, staffing constraints, and recipient contribution levels. Changes in the approval process and human resource allocations led to the redesign of the Program to better reflect program experience. However, there are still inefficiencies in AgriRisk's processes that delay approvals and reimbursements. Program delivery could be further improved and streamlined to ensure timely approvals.

Recommendation 4: The Assistant Deputy Minister, Programs Branch, should clarify, streamline, and communicate program procedures, guidelines and processes, to reduce the time to approve applications and reimburse claims.

7.0 MANAGEMENT RESPONSE AND ACTION PLAN

Evaluation of AgriRisk Initiatives Program (AgriRisk)			
RECOMMENDATION	MANAGEMENT RESPONSE AND ACTION PLAN (MRAP)	TARGET DATE	RESPONSIBLE POSITION (S)
Recommendation 1: The Assistant Deputy Minister, Programs Branch, should expand AgriRisk's promotional efforts to increase awareness of the Program.	Agreed. A strategy for stakeholder engagement will be developed and implemented to promote and increase awareness of the program within the federal, provincial and territorial governments as well as with stakeholders from the agricultural and financial services industry. The strategy will include specific measures to engage Indigenous groups, and other underrepresented communities, in the agricultural sectors; and other activities, such as the possibility of using a call for proposal process and/or micro funding to promote and increase awareness.	December 2018	Director General, Business Risk Management, Programs Directorate
Recommendation 2: The Assistant Deputy Minister, Programs Branch, should review the requirements for the Administrative Capacity Building stream to increase the access of projects.	Agreed. Under the Canadian Agricultural Partnership, AgriRisk program Terms and Conditions were revised to broaden the eligible recipients. To increase access to the AgriRisk's Administrative Capacity Building stream, provinces and territories will consistently be engaged through the FPT working group meetings and will continue to play an important role.	December 2018	Director General, Business Risk Management, Programs Directorate
Recommendation 3: The Assistant Deputy Minister, Programs Branch, should incorporate fora that use industry expertise, networks and experience, such as external program advisory councils or involving external expertise in the program for further industry coordination and engagement.	Agreed. Under CAP, the AgriRisk program Terms and Conditions were revised to engage outside expertise to assist in the assessment of any aspect of a project or applicant. As AgriRisk explores the use of a call for proposal approach, the use of external expertise may be considered for industry engagement as well as for assessments. Criteria can also now be used to establish a priority ranking of eligible projects.	December 2018	Director General, Business Risk Management, Programs Directorate

Evaluation of AgriRisk Initiatives Program (AgriRisk)			
RECOMMENDATION	MANAGEMENT RESPONSE AND ACTION PLAN (MRAP)	TARGET DATE	RESPONSIBLE POSITION (S)
Recommendation 4: The Assistant Deputy Minister, Programs Branch, should clarify, streamline and communicate program procedures, guidelines and processes, to reduce the time to approve applications and reimburse claims.	Agreed. The program will undertake a full review of all program documents, including guidelines, application forms and claims, to streamline and simplify the process for both the applicant/recipient and program staff. The program will adopt best practices, such as incorporating the findings of the Programs branch LEAN process for claims. The AgriRisk IM/IT investment plan will include enhancements to the Business Risk Management Cost Sharing System to improve the user interface and streamline the processes.	December 2018	Director General, Business Risk Management, Programs Directorate

ANNEX A: EVALUATION METHODOLOGY

The evaluation was conducted in accordance with the Treasury Board *Policy on Results* and *Directive on Results*. It assessed the relevance and performance of AgriRisk, specifically focusing on results or progress on results achieved by the Program to date in terms of effectiveness, efficiency and economy.

The evaluation covered AgriRisk's performance and relevance from 2013-14 to 2017-18. The evaluation was summative and non-experimental in design.

Sources of evidence were as follows:

- **Literature Review:** The evaluation collected and reviewed academic and grey literature related to topics of private agricultural insurance and other risk management tools in Canada and elsewhere. This literature review contributed to evaluation questions related to the Program's continued need and relevance, as well as an understanding of the challenges that the development of private agricultural insurance and other risk management tools face.
- **Document Review:** The evaluation collected, coded and reviewed relevant documents such as project applications, progress reports, briefing notes, memoranda, presentations, policies and internal research documents. For the project-specific documents, there were 34 R&D projects that were mature enough to have project documentation to analyze. The document review contributed to evaluation questions related to program outputs and outcomes, as well as partnerships with the financial services industry.
- **Stakeholders Interviews:** The evaluation conducted 14 interviews with internal and external stakeholders including AAFC staff, staff from provincial agricultural ministries, and external stakeholders in the agricultural and financial services industries. These interviews contributed to all parts of the evaluations and were invaluable given the Program's relative infancy and low survey response rate.
- **Program Data:** The evaluation collected, coded, and analyzed program and financial data from the Program's database, internal folders, and requests to financial management and program advisors in the National Capital Region and Winnipeg. In addition to aggregate financial data received through requests, projects that were approved or in the pipeline to be approved were coded on various relevant indicators such as risk, region, industry, funding, and program stream. The analysis of program and financial data contributed to questions of economy and efficiency, and provided insights to whether the allocation of program funding is aligned with the needs of the agricultural sector and its producers.
- **Survey:** Project recipients' responses (12) obtained through a survey and case study interviews (8) were combined and consisted of 20 respondents including four Administrative Capacity Building and 16 R&D projects. A total of three projects had been completed and 17 were ongoing at the time of the evaluation.

- **Case Studies:** The evaluation undertook seven case studies on 10 specific projects or cluster of projects, with the assistance of consultants who conducted interviews with key informants and reviewed relevant project documents. The case studies provided in-depth analysis of specific projects and contributed to the evaluation questions related to performance such as the awareness, access and adoption of private risk management tools. The case studies also contributed to other evaluation questions related to efficiency.

Methodological Limitations

Methodological limitations were taken into account in interpreting the data:

Limitation	Impact on Evaluation	Mitigation Strategy
Low response rate to survey of project recipients (only 12 responded to the survey)	Less recipient data than anticipated is available for certain aspects of the evaluation.	Recipient responses obtained through surveys and case study interviews were combined in the analysis of responses since similar questions were asked. Findings were cross-referenced with other lines of evidence such as the file review and interviews.
Limited availability of performance data since many projects were ongoing or only recently started	The evaluation offers some insights into the progress and impacts of the Program to date but is unable to identify intermediate and longer-term impacts.	The evaluation focused on progress to date and early indications of impacts, such as whether producers or stakeholders expressed interest in a product. Surveys, case studies and interviews provided complementary evidence of impacts not found in project reports.
The diverse range of projects and sectors funded makes it difficult to identify particular needs/gaps	The evidence is limited.	A coding exercise was conducted to identify the extent to which cross-sectoral needs were being addressed in terms of types of risk/peril. The case studies provided more detailed examples of how the Program is supporting the development and implementation of tools to address these needs.

ANNEX B: AGRIRISK INITIATIVES PROGRAM LOGIC MODEL

Objective (s)	To support the development and adoption of new private sector, provincial or territorial government, or industry-led agricultural risk management tools products and services, and to expand the role and increase the engagement of the private sector financial services industry in providing risk management tools to the agricultural sector.		
Activities	ARI Program promotion and communications	Negotiate and administer grants and contributions agreements with approved projects	ARI Program oversight
Outputs	Presentations to stakeholder groups, website, information products	Project reports: Risk assessments; research studies; business cases for new tools	Project funding, financial and performance reports, compliance audits, etc.
Immediate Outcomes	Industry has increased awareness of current agricultural risk management tools and mitigation strategies.		Industry has access to new/expanded agricultural risk management tools.
Intermediate Outcomes	Industry increases its adoption of new/expanded agricultural business risk management tools.		
End Outcomes	Industry has increased awareness of current agricultural risk management tools and mitigation strategies and has access to new or expanded business risk management tools		
Link to PAA	1.2 Business Risk Management		
AAFC Strategic Outcome	A competitive and market-oriented agriculture, agri-food and agri-based products sector that proactively manages risk		

Source: AgriRisk Program Performance Measurement and Risk Management Strategy, 2016.

ANNEX C: CASE STUDIES

Seven case studies comprising of 10 AgriRisk projects⁵ were undertaken to provide contextual details and other information to assess the Program's impact on the recipients and their respective sectors as well as lessons learned from the Program delivery. Case studies assessed the challenges that AgriRisk recipients face throughout the project cycle and how successful AgriRisk funding has been in ensuring access and awareness by producers of products developed through AgriRisk streams. The case studies provided examples and other information to support findings arising from other lines of evidence.

The case studies included a mix of completed, ongoing and recently approved projects. Other criteria that were used to select the case studies included: a mix of R&D and Administrative Capacity Building streams, industries, types of risk or peril that projects aimed to address, as well as projects that have been identified through other lines of evidence as being particularly successful or that have experienced challenges. The seven cases studies are listed below:

#	Case Studies
1	Crop Data and Price Reporting (1 R&D) – Alberta Wheat Commission
2	AgriShield (1 R&D) – Farm Management Canada
3	Western Livestock Price Insurance Program (4 Administrative Capacity Building) & Western Hog Price Insurance Program (1 R&D)
4	Sustaining the Poultry Industry in the Face of Infectious Disease Outbreaks Utilizing Movement Permits and Risk Transfer Programs (1 R&D) – Chicken Farmers of Ontario
5	Launch of Agrométéo/AgWeather risk management tool in Quebec – Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec (1 Administrative Capacity Building)
6	Guy Carpenter Professorship in Agricultural Risk Management and Insurance – University of Manitoba (1 R&D)
7	Challenges in Program Design and Delivery (combined case study, interview and survey results across a variety of projects)

For each case study, the following activities were undertaken at a minimum:

- Identifying stakeholders involved in design and implementation of the case study projects;
- Developing interview questions and protocols necessary to conduct individual interviews;
- Conducting telephone interviews based on the interview questions and protocols developed;
- Requesting documents and files demonstrating success of the projects;
- Conducting a detailed review of all documents and materials (e.g., project proposals, annual and progress reports, budget and outputs generated by the project) related to each case study project; and
- Conducting content analysis of all the collected data (i.e. results of interviews, and additional documents and files).

⁵ The Western Livestock Price Insurance Program and the AgAtlantic project were counted as four and three separate projects respectively to account for each provincial funding recipient.

ANNEX D: AGRIRISK PROJECT FUNDING

Fifty-eight AgriRisk projects have been approved totaling over \$34.3-million in AAFC funding (85 applications were received in total). As indicated in Table 6, 48 R&D projects were approved for \$18.7-million in AAFC funding. More R&D funding is dedicated to national projects, target a variety of sectors, address climate and weather risks, and plan to result in models. Ten Administrative Capacity Building projects were approved for \$15.6-million in AAFC funding. A higher proportion of funding is dedicated to Administrative Capacity Building projects in Western Canada that target the development of products to address market and price risk in the beef and pork industries.

Table 6: Profile of AgriRisk Project Funding

	Number of Projects		AAFC Funding	
	#	%	\$	%
Approved Projects by Region				
R&D				
Canada	13	27%	\$5,206,221	28%
Ontario	9	19%	\$2,542,874	14%
Alberta	6	13%	\$4,074,936	22%
Quebec	4	8%	\$1,251,471	7%
Western Canada	4	8%	\$680,675	4%
Saskatchewan	3	6%	\$1,134,027	6%
British Columbia	2	4%	\$449,629	2%
Manitoba	2	4%	\$1,252,999	7%
Atlantic Canada	1	2%	\$84,000	0%
Multiple	1	2%	\$318,500	2%
Newfoundland	1	2%	\$365,291	2%
Nova Scotia	1	2%	\$1,000,000	5%
Prince Edward Island	1	2%	\$300,500	2%
Total	48	100%	\$18,661,123	100%
Administrative Capacity Building				
Western Canada	4	40%	\$12,697,407	81%
Atlantic Canada	3	30%	\$182,550	1%
Quebec	3	30%	\$2,735,350	18%
Total	10	100%	\$15,615,307	100%
AgriRisk Total	58	—	\$34,276,430	—
Approved Projects by Industry				
R&D				
No specific sector	17	35%	\$8,757,885	47%
Beef	7	15%	\$2,984,778	16%
Poultry	6	13%	\$2,695,080	14%
Pork	4	8%	\$930,025	5%
Fruit and Vegetable	3	6%	\$228,600	1%
Floriculture	2	4%	\$236,469	1%
Canola	1	2%	\$150,600	1%
Fur	1	2%	\$202,410	1%
Grain and Oilseed	1	2%	\$153,310	1%

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Hemp	1	2%	\$330,550	2%
Organic	1	2%	\$461,816	2%
Sheep	1	2%	\$437,562	2%
Sheep and Beef	1	2%	\$151,913	1%
Soy	1	2%	\$197,400	1%
Wheat	1	2%	\$742,725	4%
Total	48	100%	\$18,661,123	100%
Administrative Capacity Building				
Beef and Pork	4	40%	\$12,697,407	81%
No specific sector	4	40%	\$2,027,900	13%
Maple Syrup	1	10%	\$465,000	3%
Pork	1	10%	\$425,000	3%
Total	10	100%	\$15,615,307	100%
AgriRisk Total	58	—	\$34,276,430	—
Approved Projects by Risk/Peril				
R&D				
Price/Market	12	25%	\$2,710,678	15%
Disease/Pest	10	21%	\$3,337,099	18%
No Specific risk	10	21%	\$4,060,978	22%
Climate/Weather	7	15%	\$4,057,437	22%
Production	6	13%	\$3,665,106	20%
Financial/Credit	3	6%	\$829,825	4%
Total	48	100%	\$18,661,123	100%
Administrative Capacity Building				
Price/Market	6	60%	\$13,587,407	87%
Climate/Weather	4	40%	\$2,027,900	13%
Total	10	100%	\$15,615,307	100%
AgriRisk Total	58	—	\$34,276,430	—
Approved Projects by Result				
R&D				
Risk Assessment	14	29%	\$5,264,473	28%
Product	11	23%	\$4,680,068	25%
Modelling	10	21%	\$6,115,502	33%
Development	5	10%	\$806,533	4%
Feasibility Study	5	10%	\$714,885	4%
Research	3	6%	\$1,079,662	6%
Total	48	100%	\$18,661,123	100%
Administrative Capacity Building				
Product	10	100%	\$15,615,307	100%
Total	10	100%	\$15,615,307	100%
AgriRisk Total	58	—	\$34,276,430	—

Source: Program Project Documentation